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## The Understanding of Indonesian Patients of Hospital Service Quality in Singapore

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### Abstract

Medical services can be categorized as a credential product. Some Indonesian citizens prefer to go abroad to get their medical treatment. They think that hospitals abroad such as Singapore can provide them with better medical treatment. The purpose of the study is to investigate the understanding of a good service among Indonesian patients who have had medical treatment in Singapore. Most of the previous studies have been focusing on quantitative research in understanding consumers' perception of service quality. We believe that qualitative research can make a significant contribution to the understanding of service quality in the context of a hospital. The study employs qualitative methodology in collecting information from the informants. In-depth interviews were conducted on 15 informants who have had out-patient or in-patient medical treatment in four hospitals in Singapore. The age of the informants ranged from 19 to 64 years old. Their minimum education was junior high school. The frequency of their visits to a Singaporean hospital ranged from 1 to 12. The main question asked was "What is the informant's understanding of a good quality service in healthcare. The interviews were recorded, transcribed and then analyzed. The research process is reliable and valid in terms of cumulative, communicative, and argumentative validity. Our findings indicate that the dimensions that contribute to good perceptions of service quality are technical, interpersonal, tangibles, access and responsiveness, value, and outcomes. The contribution of our study is the inclusion of the dimension value and sub-dimension of customer orientation on the informants' understanding of service quality.

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## 1. Introduction

Currently, health is one of the important things needed by everyone. This is evidenced by the increasing number of private hospitals or clinics being established. In Indonesia, several international standard hospitals with various advanced facilities have been established. However, the services provided by Indonesian hospitals are lacking as compared to the services provided by the hospitals abroad.

In connection with this, there is an interesting phenomenon in recent years in which a large number of Indonesian patients seek medical treatment abroad. Approximately 30-40 percent of foreign patients at any one time in Singapore are Indonesian (International Medical Travel Journal, 2008). The quality of hospital care is an important aspect that affects the intention of a patient to have medical treatment in his or her home country or to choose a hospital abroad.

We are interested in studying the patients' perception of service quality provided by the hospitals in Singapore. This study aims to discover the patient's understanding of service quality in hospitals in Singapore.

## 2. Literature review

Service quality is defined as the overall evaluation of the performance of a service entity (Cronin and Taylor, 1992). Even though the evaluation has been described as the difference between customer's expectation and perception of a service, some researchers have argued that it is better to measure service quality solely on perception (see Dagger, Sweeny and Johnson, 2007). This argument should also make a firmer difference between perceived service quality and customer satisfaction since the latter is usually defined as the difference between customer expectation and perception of product performance.

The application of service quality model in health care or hospital has been widely conducted (e.g. Vandamme and Leunis, 1993; Rashid and Jussof, 2009; Rose, Uli, Abdul and Ng, 2004). Researchers have been trying to adapt the service quality model to the specific needs of hospital industry.

There are two challenges faced by the researcher in hospital service quality. Firstly, patients do not use the technical aspect of service as the measurement of service quality because most patients do not understand or do not have access to the information to evaluate the technical aspect (Tucker and Adams, 2001). Secondly, the relationship between patients' satisfaction and quality is still undecided (Tucker and Adams, 2001). Therefore, Tucker and Adams (2001) are integrating the concept of satisfaction and service quality into an integrative model.

The researchers have been proposing their models of service quality in hospital. Most of them are based on the RATER dimensions proposed by PZB (Parasuraman, Zeithaml, and Berry 1985, 1988). Lim and Tang (2000) add the dimension of "accessibility and affordability" to 5 dimensions of "reliability", "assurance", "tangibles", "empathy", and "responsiveness". Tucker and Adams (2001) add "caring", "communication" and "outcome". Andaleeb (1998) and Hasin et al. (1998) add "cost". On the other hand, Tomes and Ng (2001), develop 7 dimensions: "empathy", "understanding of illness", "relationship of mutual respect", "dignity", "food", "physical environment" and "religious needs" based on their study on a different perspective, which is The Patients' Charter.

Developing the model from the previous studies, Rose et al. (2004) develop the dimensions of "technical", "interpersonal", "amenities/ environment", "access/ waiting time", "costs", "outcomes" and "religious needs". The other more notable study by Dagger et al. (2008) divide service quality into 5 dimensions which are more comprehensive, each with some sub-dimensions, they are "interpersonal (interaction and relationship)", "technical (outcome and expertise)", "environmental quality (atmosphere and tangibles)", and "administrative quality (timeliness, operation, and support)".

Although most patients cannot evaluate the technical aspect of hospital service quality in terms of technical accuracies and procedures (Rashid and Jussof, 2009), from the models above, there have been attempts to measure patients' perception of the technical aspect. The researchers use the dimensions of "reliability", "outcome", "understanding of illness", "technical" and "expertise" to portray how patients evaluate the technical dimension.

### 3. Methodology

In this study, the researchers interviewed 15 people who had the appropriate criteria to become informants. Interviews were conducted directly by the researchers with the method of in-depth interviews. The informants selected for this study were those that had had in-patient or out-patient treatment experience in a hospital in Singapore. They were found through the social networks of one of the researchers.

Researchers asked the informants a question regarding good quality services. The question asked how the patients understood the quality of hospital services based on their experience. The question in the interview was an open question that gave ample scope to the respondents to answer freely. The next question that followed was a question relating to the informant's answers to previous questions. It was used with the aim that the author could capture precisely what the informants had said (follow up questions).

For data analysis, we used the technique suggested by Miles and Huberman (1994) in the form of three interrelated activities: (a) data reduction activities, (b) displays the data, and (c) verify to make conclusions. The validity of the study was achieved by using the technique of cumulative validity, communicative validity, and argumentative validity (Sarantakos, 1993). In achieving cumulative validity, the researchers conducted a thorough study of the previous research. In achieving communicative validity, the researchers reconfirmed the statement and analysis with the informants. In argumentative validity, researchers reconfirmed the findings with the raw data or verbatim.

### 4. Findings and discussions

There were 15 informants interviewed in this study. They had undergone medical treatment in four hospitals in Singapore, Mount Elizabeth, Gleneagles, National University Hospital and Singapore General Hospital. Seven informants aged 35 or younger, 5 aged 36 to 50, and 3 aged 51-65. The education background is as follows: 1 informant possessed junior high school education, 10 senior high school, and 4 undergraduates.

After conducting the analysis, we found that the perception of service quality among informants could be categorized into 5 dimensions.

#### 4.1. Technical

The technical quality in hospital service is associated with the patients' expectation that the service provider can provide a precise diagnosis to the patients or perform the appropriate procedure to suit the patients' needs. Patients would want a cure when they go to a hospital. They want service providers, especially physicians, who are considered good and competent so as to know their condition and can provide appropriate treatment. The sub-dimensions of technical quality are explained below:

##### - Credibility

Patients want a provider that has a high performance which raised confidence, as expressed by Informant 8:

*...Um ... he says there is a stone in the bile, my bile. I must be operated to take the stones. So I asked my friends. They said Singapore is good, so I came, came to Singapore for surgery...*

##### - Reliability

Informants reveal that confidence or safety feeling is required when they choose to have the treatment abroad. They rely on the ability of service providers in Singapore to serve them, as expressed by Informant 12:

*....So, yes more, because they are more, more, um, yes save for us. So we are calmer ...*

##### - Professionalism and skills

Patients are aware of the importance of the knowledge and skills of medical personnel. For instance, informants 7 mention that:

*...Um ..., it is our experience for medical treatment in Singapore. The first of the doctors there, if we have any pain, what are the details of it are researched meticulously. Um, and the medicine is not like in Indonesia with so many drugs given. So, only the main are given, the important ones.*

- Assurance

Patients receive guarantee that the service provider is able to do its job well and the medical team has the knowledge expected.

- Outcomes

Outcomes sub-dimension is further divided into 3 aspects:

a. Patients' health status

Outcomes desired by patients after the interaction with the medical team are being healed or changes that affect their understanding and future health status.

b. Transparency and fairness

Patients want the outcomes which are honest and transparent from service providers, especially the doctors. Informant 1 states that:

*If the hospital there they do not indiscriminately give you drugs, then they charge you fairly. If here, sometimes we got deceived. Already paid but claimed has not paid all kinds...*

c. Customer orientation

Hospitals should give the impression of wanting to help and to prioritize patients, so it is not the impression of commerciality that comes first, but the health of the patient. Informant 10 explains below:

*So they sometimes there are some who are financially not being made complicated.... because in my time there are some that like, um, could not, um have treatment but cannot pay. But the end was not being chased, not even brought to the court. But because they prioritized to heal people if in Singapore ... Truly yeah this is indeed human who live definitely in need of money, just the hospital and treated disease is severe disease, pretty severe.....*

#### 4.2. Interpersonal

Service providers are not only required to cure patients but also to be caring with good communication. Interpersonal relationships that occur between patients and service providers are also important factors. The sub-dimensions of interpersonal quality are explained below:

- Empathy

Patients need a psychological boost in which service providers become partners who understand the patient as expressed by Informant 13 when answering the follow-up question from the interviewer:

*... Yes, more attentive. Don't know how. But her face shows cheerfulness and smile while serving, especially nurses. No shows like reluctance or such like just getting out of bed, a bit lazy and so forth although it is early morning. That's the difference in general....*

- Friendly

The informants said that the service providers who are friendly and patient can help them in treatment.

- Helpful

Service providers help patients because they truly want to be caring of the patients, not just to meet their wants, but know their needs.

#### - Communication

There is a need for two-way communication between a patient and a doctor so that the former can be comfortable in making a complaint and getting a good response. This is explained by Informant 12:

*In Singapore right ...because they are good. Then the way they communicate was good. Then they are very careful, no, no direct haphazard verdict. So before got anything, they do not want, do not want to give a tiny verdict. Once we've checked, CT-scans already out, they just say this. But they say there is a solution and you can be cured with surgery - chemotherapy....*

#### - Understanding

The doctor understands the patient and is willing to listen to the problems of the patients without directly examining a patient with a particular tool.

### 4.3. Tangibles

Tangibles refer to the physical evidence that supports service quality. Tangibles consist of hospital hygiene, building, environmental, infrastructure, and sophisticated medical tools. Informant 15 explains as follows:

*Uh ... if my experience anyway yes, if in Singapore the medical equipment, medical equipment is very sophisticated. So, the medical equipment actually is a tool to support the doctor in forming the content of a diagnosis, isn't it ...*

### 4.4. Access and responsiveness

Ease of patients to get a health care without having to wait too long since service provider is responsive and do not have any complicated procedures. Informant 8 explains:

*So ... if you ask for anything, they don't make any delay. Everything is our priority. Yes, the service is good...*

Informant 2 explains about being responsive:

*um, for the good quality of hospital service should has rapid response in particular circumstances ..... if for example the hospital itself does not respond well, they automatically do not provide good service.*

### 4.5. Value

Patients compare the amount of effort made to the value or result of services they got. The greater is the cost, the better are the services expected.

Informant 11 explains below:

*Owh, I think it is really comparable. So like I produce, um what, pay a lot of money, but I am satisfied with the outcome. I got what I am sick of; I got what drug to cure it, and how to prevent from getting sick again. So like with an expensive price, I got everything.*

Based on the findings above, it is concluded that customers in medical or health services (in-patient and out-patient) undergo a process through 3 stages. Those stages are pre purchase, service encounter, and post encounter (Lovelock & Wirtz, 2010).

In the stage of pre purchase, customers are looking for solutions that fit their needs and begin to find available alternatives. Since health services fall into the category of credence quality product – in which this product is difficult to be evaluated by the customer, even after the service has been consumed – it is difficult to look for alternatives and assess the quality of health services. Customers need references from others (relatives of friends) who have knowledge or experience. In other words, the reputation and credibility of the hospital create a corporate image that forms the expected quality, which in turn becomes a driving force for someone to choose a hospital.

In the service encounter stage, customers obtain the health care services. These services are supported by the service providers (personnel) and existing hospital systems. This stage is associated with the interaction between patients and service providers in the hospital. In this stage, informants can assess functional quality generated by the service provider, in terms of interpersonal relationships and responses from the service provider.

In the post encounter stage, the customers have finished interacting with service providers and they evaluate the results. They can assess what they got from the interaction and what were the technical quality of the hospital services (assessed from the performance and expertise of the service providers as well as the physical facilities).

Grönroos (2007) explains that after functional quality and technical quality are combined, customer will form the perception of corporate or country image. They tend to compare their earlier image (expected quality) with their own experiences during the process of treatment and thereafter (experienced quality). Both are compared to form the total perceived quality that will lead to the formation of a new image.

The results of this study indicate that there are 5 dimensions of quality of hospital services. Based on Table 1, this study found that patients understand the quality based on 5 dimensions, namely technical, interpersonal, tangibles, access and responsiveness, value, and outcomes. Then each dimension is further understood through each sub-dimensions listed in the Table 1.

Table 1. Dimensions of service quality.

Dimensions	Sub-dimensions	Aspects
Technical	Credibility	
	Reliability	
	Professionalism & skills	
	Assurance	
	Outcomes	Patient health status Transparency and fairness Customer orientation
Interpersonal	Empathy	
	Friendly	
	Helpful	
	Communication	
	Understanding	
Tangibles	Tangibles	
Access and responsiveness	Access and responsiveness	
Value	Value	

The result of this study has high resemblance with the previous studies. The dimensions identified by Dagger et al. (2008) are also found in the current study. The first 3 dimensions in Dagger et al. (2008) are the same with the current study, while the dimension of administrative quality is similar to the dimension of access and responsiveness. The first 4 dimensions in Rose et al. (2004) are the same with the current study, while the dimension of cost is similar to the dimension of value, as the ultimate meaning of cost to the customer is value. The dimension of outcomes in Rose et al. (2004) is also found in the current study. The difference lies in it not being considered as a stand-alone dimension, but as the sub-dimension of technical dimension. The other difference is the inclusion of religious needs in Rose et al. (2004) (see Table 2).

The new finding in the current study is the elaboration of the dimensions of technical and interpersonal into smaller sub-dimensions. Each of them is divided into 5 sub-dimensions. The sub-dimension of outcomes is elaborated in terms of the aspects of patient health status, transparency and fairness, and customer orientation.

The dimensions of credibility, transparency and fairness, and customer orientation are the new sub-dimensions of service quality. The importance of the sub-dimension of credibility can be attributed to the context in this study in which the informants are Indonesian patients who seek better hospital service in another country. Credibility of the medical service in Singapore is the main reason why they come for hospital service. All the three dimensions can be attributed to hospital service as a credential product. To compensate their inability to accurately evaluate the quality of medical service, patients are relying on credibility, transparency and fairness, and customer orientation.

Unlike other researchers which marginalize the importance of technical aspect (Rashid and Jusoff, 2009; Tucker and Adams, 2001), the current study found that technical aspect is important for hospital service. This finding is also supported by the study of Rose et al. (2004) which indicates that technical quality is the most important aspect of hospital service.

Table 2. The comparison of result of the current study with the previous studies.

Current Study	Dagger et al. (2008)	Rose et al. (2004)
Technical	Technical	Technical
Interpersonal	Interpersonal	Interpersonal
Tangibles	Environmental quality	Amenities/ environment
Access and responsiveness	Administrative quality	Access/ waiting time
Value		Costs
		Outcomes
		Religious needs

## 5. Conclusion

In conclusion, customers' understanding of good quality services in hospitals in Singapore is divided into five dimensions, i.e. technical, interpersonal, tangibles, access and responsiveness, and value. Those dimensions are important for the patients. The findings of the current study indicate that the model of service quality in hospital is different from the general model introduced by Parasuraman et al. (1985, 1988). Customizing the model of service quality to the needs and uniqueness of the hospital service is a measure that will benefit the research of service quality.

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